

Case 2738***Acanthophtalmus* van Hasselt in Temminck, 1824 (Osteichthyes, Cypriniformes): proposed conservation, and proposed designation of *Cobitis kuhlii* Valenciennes in Cuvier & Valenciennes, 1846 as the type species**

Mary E. BurrIDGE

*Royal Ontario Museum, Department of Ichthyology and Herpetology,
100 Queen's Park, Toronto, Canada M5S 2C6*

Darrell J. Siebert

*Department of Zoology, The Natural History Museum, Cromwell Road,
London, SW7 5BD, U.K.*

Carl Ferraris, Jr.

*Department of Ichthyology and Herpetology, American Museum of Natural
History, Central Park West at 79th Street, New York, N.Y. 10024, U.S.A.*

Abstract. The purpose of this application is to designate *Cobitis kuhlii* Valenciennes in Cuvier & Valenciennes, 1846 as the type species of *Acanthophtalmus* van Hasselt in Temminck, 1824, a genus of small cobitid fishes from Southeast Asia, commonly known as the coolie loaches, in accordance with accustomed interpretation and usage. The generic name was first published (1823) as *Acantophtalmus* but this spelling has not been used and its suppression is proposed.

1. In 1823 van Hasselt (p. 133) proposed the generic name *Acanthophtalmus* for some of the loaches with an erectile suborbital spine. The genus included *Cobitis taenia* Linnaeus, 1758, but the three other species, including *fasciatus*, were nomina nuda, as noted by Kottelat (1987, p. 371). *C. taenia* is thereby fixed as the type species of *Acanthophtalmus* by monotypy; its inclusion makes *Acanthophtalmus* an available name (Article 12b(5) of the Code).

2. The work by van Hasselt consists of parts of letters sent from Java to Temminck at the Leiden museum, two of which contained several new fish names and which were published by the latter in 1823 after van Hasselt's death. A series of drawings sent by van Hasselt to Temminck, which were subsequently seen by Valenciennes, have never been published and are now presumed to have been lost (Kottelat, 1987, p. 368). A subsequent (1824a, b) French translation of the letters from the original Dutch contained many alterations in the text and 'corrections' in the spelling of several of the names which were probably made by Valenciennes (see Alfred, 1962, p. 80). For example, *Acanthophtalmus* and *Acantopsis*, both genera of loaches, are two names spelled differently in the 1823 and 1824 versions. An 'h' was added to the 'Acant-' prefix

in both names, to produce *Acanthophtthalmus* and *Acanthopsis* (van Hasselt in Temminck, 1824b, pp. 376–377). The spellings *Acanthophtthalmus* and *Acanthopsis* are unjustified emendations but, under Article 33b(iii), are available names. *Cobitis taenia* remains the type species of the nominal genus *Acanthophtthalmus*. The French version of the second communication, in which the name *Acanthophtthalmus* appeared, is unsigned; however, van Hasselt's name was published at the end of the first letter (1824a, p. 92), and the name *Acanthophtthalmus* (1824) is ascribed to him. The spelling *Acanthophtthalmus* was adopted by later authors. Valenciennes in Cuvier & Valenciennes (1846, pp. 25–26) attributed authorship of the name *Acanthophtthalmus* to Kuhl and van Hasselt but clearly it should be ascribed to van Hasselt alone, and is correctly cited as van Hasselt in Temminck (Recommendation 51B of the Code). (The authorship and dates of publication of the various parts of *Histoire Naturelle des Poissons* by Cuvier & Valenciennes are set out in Opinion 580, December 1959).

3. In the same 1823 Dutch work, van Hasselt (p. 133) also proposed the new generic name *Noemacheilus*, with the single included species *fasciatus*. The binomen was repeated in the 1824 French translation with the spelling unchanged but in both versions it is a nomen nudum. Valenciennes (1846) described the species *fasciatus*, which lacks the suborbital spine, from a specimen and one of van Hasselt's drawings sent to him by Temminck. Valenciennes did not accept *Noemacheilus* as a taxonomically distinct genus, and placed all the loaches in *Cobitis* Linnaeus, 1758.

4. Valenciennes (1846, p. 77) also provided a description for van Hasselt's species *Acanthophtthalmus fasciatus* (see para. 1), and renamed it *Cobitis kuhlii* to avoid homonymy within *Cobitis*. Bleeker (1858, p. 304) listed and described the genera of loaches known to inhabit the 'Archipelagi Indici', including *Acanthophtthalmus* (attributing the name to van Hasselt). In 1863, Bleeker (p. 364) designated '*Acanthophtthalmus fasciatus* van Hasselt' (which he listed (p. 367) as '= *Cobitis kuhlii* Valenciennes') as the type species of *Acanthophtthalmus*, although, as pointed out in para. 1, *Cobitis taenia* Linnaeus, 1758 is the type species by monotypy. Bleeker excluded *C. taenia* from *Acanthophtthalmus*. Bleeker's concept of the genus has been adopted by subsequent authors and is still current today, although it is illegitimate under the modern Code because of the exclusion of *C. taenia*.

5. Also in 1863, Bleeker (pp. 362, 364) designated *Cobitis taenia* Linnaeus, 1758 as the type species of *Cobitis* Linnaeus, 1758 and recently the Commission validated this designation (Opinion 1500, June 1988). *Acanthophtthalmus* van Hasselt in Temminck, 1823 thus became a junior objective synonym of *Cobitis* Linnaeus, 1758 and it was so placed on the Official Index of Rejected and Invalid Generic Names in Zoology. It follows that *Acanthophtthalmus* van Hasselt in Temminck, 1824 is also a junior objective synonym of *Cobitis*.

6. Blyth (1860, p. 169) described a new genus, *Pangio*, for *Cobitis cinnamomea* McClelland, 1839 (p. 304), which McClelland had unnecessarily proposed as a replacement name for *C. pangio* Hamilton, 1822. *C. cinnamomea* is currently included among the coolie loaches. Following Bleeker (1863, pp. 363, 364), *Pangio* has consistently been considered as a junior subjective synonym of *Acanthophtthalmus* and has had no subsequent use (see Systematic Index of the Pisces sections of *Zoological Record*, 1864 to 1989). It was adopted, however, by Kottelat in 1987 (p. 371), who drew attention to the considerable confusion that the loss of the generic name *Acanthophtthalmus* as a junior objective synonym of *Cobitis* would cause. Acceptance of *Pangio* as the name for the

coolie loaches would upset nearly 130 years of consistent usage of *Acanthopthalmus* in both the technical and popular literature. Several species are now included in the genus and the name *Acanthopthalmus* appears in catalogues and guides, including Nelson (1985, p. 127), Roberts (1989), Smith (1965, pp. 287, 299–301) and Weber & de Beaufort (1916, pp. 30–35), as well as taxonomic works. A representative list of 14 references, ranging from 1868 to 1989, which demonstrate use of the name is held by the Commission Secretariat.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers:
 - (a) to suppress the generic name *Acanthopthalmus* van Hasselt in Temminck, 1823 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) to set aside all previous fixations of type species for the nominal genus *Acanthopthalmus* van Hasselt in Temminck, 1824 and to designate *Cobitis kuhlii* Valenciennes in Cuvier & Valenciennes, 1846 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Acanthopthalmus* van Hasselt in Temminck, 1824 (gender: masculine), type species by designation in (1)(b) above *Cobitis kuhlii* Valenciennes in Cuvier & Valenciennes, 1846;
- (3) to place on the Official List of Specific Names in Zoology the name *kuhlii* Valenciennes in Cuvier & Valenciennes, 1846, as published in the binomen *Cobitis kuhlii* (specific name of the type species of *Acanthopthalmus* van Hasselt in Temminck, 1824);
- (4) to amend the entry on the Official Index of Rejected and Invalid Generic Names in Zoology for the name *Acanthopthalmus* van Hasselt in Temminck, 1823, to note its suppression as in (1)(a) above.

Acknowledgements

R.M. Bailey, W.I. Follett, V.G. Springer and R. Winterbottom read previous versions of our manuscript, or discussed various issues contained in it. We gratefully acknowledge their comments and advice. This is not to be taken as their agreement with, or endorsement of, our solution to these problems.

References

- Alfred, E. 1962. The Javanese Fishes described by Kuhl and van Hasselt. *Bulletin of the National Museum, State of Singapore*, 30: 80–88.
- Bleeker, P. 1858. Nieuwe geslachten van Cobitinen. *Natuurkundig Tijdschrift voor Nederlandsch-Indië*, 16(5): 302–304.
- Bleeker, P. 1863. Sur les genres de la famille des Cobitioïdes. *Nederlandsch Tijdschrift voor de Dierkunde*, 1: 361–368.
- Blyth, E. 1860. Report on some fishes received chiefly from the Sitang River and its tributary streams, Tenasserim Provinces. *Journal of the Asiatic Society of Bengal*, 29: 138–174.
- Hasselt, J.C. van. 1823. In Temminck, C.J. Uittreksel uit een' brief van den Heer J.C. van Hasselt, aan den Heer C.J. Temminck, geschreven uit Tjecande, Residentie Bantam, den 29sten December 1822. *Algemeene Konst- en Letter-Bode, voor het jaar 1823*, 2(35): 130–133.
- Hasselt, J.C. van. 1824a. In Temminck, C.J. Sur les poissons de Java. Extrait d'une première lettre du Dr J.-P. van Hasselt à M.C.J. Temminck. (*Algem. Konst. en Letterbode*, mai 1823). *Bulletin des Sciences Naturelles et de Geologie*, 2 (Zoologie): 89–92.

- Hasselt, J.C. van.** 1824b. In Temminck, C.J. Extrait d'une seconde lettre sur les poissons de Java, écrite par M Van Hasselt à M C.J. Temminck, datée de Tjecande, résidence de Bantam, 29 décembre 1822. (*Alg. Konst en Letter bode*, 1823, août, no. 35). Suite de la dernière, écrite en octobre 1822. (*Voyez l'extrait de la première, dans le Bulletin de mai, no. 73*). *Bulletin des Sciences Naturelles et de Geologie*, **2** (Zoologie): 374–377.
- Kottelat, M.** 1987. Nomenclatural status of the fish names created by C.J. van Hasselt (1823) and of some cobitoid genera. *Japanese Journal of Ichthyology*, **33**(4): 368–375.
- McClelland, J.** 1839. Indian Cyprinidae. *Asiatic Researches; or Transactions of the Society Instituted in Bengal, for Inquiring into the History, the Antiquities, the Arts and Sciences, and Literature of Asia*, **19**(2): 217–471.
- Nelson, J.S.** 1984. *Fishes of the World*. Ed. 2, xv, 523 pp. Wiley & Sons, New York.
- Roberts, T.R.** 1989. The freshwater fishes of western Borneo (Kalimantan Barat, Indonesia). *Memoirs of the California Academy of Sciences*, **14**: 1–210.
- Smith, H.M.** 1965. *The freshwater fishes of Siam or Thailand*. Ed. 2, 622 pp. Smithsonian Institution, Washington, D.C. (Reprinted from *U.S. National Museum Bulletin*, No. 188, 1945).
- Valenciennes, A.** 1846. Cyprinoïdes. Pp. 1–90 in Cuvier, G. & Valenciennes, A., *Histoire Naturelle des Poissons*, vol. 18. xix, 505 pp. Bertrand, Strasbourg.
- Weber, M. & Beaufort, L.F. de.** 1916. *The fishes of the Indo-Australian Archipelago*, vol. 3 (Ostariophysi: Cyprinoidea, Apodes, Synbranchi). 455 pp. Brill, Leiden.
- Zoological Record.** 1864–1989. Pisces in: *The Zoological Record*, vols. 1–124.